

A Ventromedian Cervical Sclerite of Mosquito Larvae
(Diptera: Culicidae)¹

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During studies on the subgenera of *Aedes* Meigen, a small pigmented plate was discovered on the ventral median region of the fourth stage larval cervical membrane. This plate, the *ventromedian cervical sclerite* (VmCS), is variable in pigmentation and development (Fig. 1). In some species and subgenera of *Aedes* (e.g., *Edwardsaedes* Belkin, *Neomelaniconion* Newstead, *Aedes* Meigen and many *Aedimorphus* Theobald) the sclerite is fairly large and heavily pigmented. Species of the subgenus *Verrallina* Theobald have a small but heavily pigmented sclerite (see illustrations of Reinert 1974). This structure was also illustrated but not described for *Aedes* (*Stegomyia*) *aegypti* (Linnaeus) by Hochman and Reinert (1974). The ventromedian cervical sclerite has a fragmented appearance in a number of species of the subgenus *Ochlerotatus* Lynch Arribalzaga (e.g., *canadensis* (Theobald) and *excrucians* (Walker)) while other species of the subgenus have a well developed complete sclerite (e.g., *atro-palpus* (Coquillett) and *sollicitans* (Walker)) and still others apparently lack the plate altogether (e.g., *atlanticus* Dyar and Knab and *dupreei* (Coquillett)).

Seventy-four species in 19 subgenera of *Aedes* examined possessed a ventromedian cervical sclerite. These species and subgenera are listed below. Generic and subgeneric abbreviations follow Reinert (1975).

<i>Ae.</i> (<i>Abr.</i>) <i>papago</i>	<i>Ae.</i> (<i>Adm.</i>) <i>mediolineatus</i>
	<i>natronius</i>
<i>Ae.</i> (<i>Aed.</i>) <i>cinereus</i>	<i>oakleyi</i>
<i>esoensis</i>	<i>orbitae</i>
	<i>pallidostriatus</i>
<i>Ae.</i> (<i>Adm.</i>) <i>alboscuteUellatus</i>	<i>pampangensis</i>
<i>caecus</i>	<i>pipersalatus</i>
<i>domesticus</i>	<i>quasiunivittatus</i>
<i>fowleri</i>	<i>senyavinensis</i>
<i>haworthi</i>	<i>stokesi</i>

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<i>Ae. (Adm.) syntheticus</i> <i>vexans</i>	<i>Ae. (Och.) canadensis</i> <i>communis</i> <i>diantaeus</i> <i>excrucians</i> <i>fulvus pallens</i> <i>intrudens</i> <i>mittchellae</i> <i>rusticus</i> <i>sollicitans</i> <i>squamiger</i> <i>taeniorhynchus</i> <i>vigilax</i> <i>vittiger</i>
<i>Ae. (Ala.) brevitibia</i>	
<i>Ae. (Azt.) ramirezi</i>	
<i>Ae. (Dic.) adersi</i> <i>franciscoi</i> <i>whartoni</i>	
<i>Ae. (Edw.) imprimens</i>	
<i>Ae. (Fin.) banksi</i> <i>formosensis</i> <i>ganapathi</i> <i>harveyi</i> <i>hurlbuti</i> <i>inermis</i> <i>prominens</i> <i>sherki</i> <i>togoi</i>	<i>Ae. (Par.) ostentatio</i> <i>Ae. (Pro.) triseriatus</i> <i>Ae. (Sku.) pembaensis</i> <i>Ae. (Stg.) aegypti</i> <i>quasiscutellaris</i> <i>vittatus</i>
<i>Ae. (Gym.) mediovittatus</i>	
<i>Ae. (How.) sexlineatus</i>	<i>Ae. (Ver.) adustus</i> <i>butleri</i> <i>carmenti</i> <i>cyrtolabis</i> <i>gibbosus</i> <i>indicus</i> <i>leicesteri</i> <i>nobukonis</i> <i>torosus</i> <i>uncus</i> <i>vallistris</i> <i>yusafi</i>
<i>Ae. (Lor.) fumidus</i>	
<i>Ae. (Muc.) laniger</i> <i>scatophagoides</i>	
<i>Ae. (Neo.) lineatopennis</i>	
<i>Ae. (Och.) abserratus</i> <i>atropalpus</i>	

Twelve species in 4 genera other than *Aedes* were also examined and were found to possess a ventromedian cervical sclerite.

<i>Cx. (Cux.) restuans</i>	<i>Hs. (Hez.) aureochaeta</i> <i>persimilis</i> <i>proxima</i> <i>reidi</i> <i>scintillans</i>
<i>Cx. (Ncx.) territans</i>	
<i>Hg. (Hag.) janthinomys</i> <i>lucifer</i> <i>mesodentatus</i> <i>regalis</i>	<i>Op. fuscus</i>

A ventromedian cervical sclerite was not found in the following species.

<i>Ae. (Ayu.) griffithi</i>	<i>Er. chrysogaster</i>
<i>peytoni</i>	
<i>Ae. (Can.) masculinus</i>	<i>Or. alba</i>
	<i>fascipes</i>
	<i>signifera</i>
<i>Ae. (Och.) atlanticus</i>	
<i>dupreei</i>	<i>Ps. (Jan.) ferox</i>
<i>An. (Ano.) crucians</i>	<i>Ps. (Pso.) ciliata</i>
<i>punctipennis</i>	<i>howardii</i>
<i>quadrимaculatus</i>	
<i>Cs. (Cus.) inornata</i>	<i>Tx. (Lyn.) rutilus</i>
	<i>Ud. argyrurus</i>
<i>Cx. (Cux.) nigripalpus</i>	<i>Ur. (Ura.) sapphirina</i>
<i>peus</i>	
<i>De. mathesoni</i>	<i>Wy. (Wyo.) mitchellii</i>
<i>pseudes</i>	<i>smithii</i>

This study was limited in scope; however, as additional species and genera are fully described and illustrated this sclerite may provide additional support for separating taxa.

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Fig. 1

